



Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Minutes of IEEE 802.16 Session #26	
Date Submitted	2003-07-25	
Source(s)	Dean S.K. Chang Aperto Networks 1637 S. Main Street Milpitas CA 95035	Voice:(408) 719-9977 Fax:(408) 719-9970 mailto:dchang@apertonet.com
Re:	IEEE 802.16 Session #26 Minutes (San Francisco, CA, USA)	
Abstract		
Purpose	To record meeting minutes.	
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.	
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Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures < http://ieee802.org/16/ipr/patents/policy.html >, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair < mailto:chair@wirelessman.org > as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site < http://ieee802.org/16/ipr/patents/notices >.	

Minutes of IEEE 802.16 Session #26

IEEE 802.16 Working Group

San Francisco, CA USA

21-25 July 2003

Opening Plenary

Call to Order

Roger Marks called the meeting to order at 1:08pm, 21 July 2003.

IEEE 802.16 Working Group Officers

Chair: Roger Marks

Vice Chair – Carl Eklund - Resigned as of end of this session. An election will be held during this meeting for a new Vice Chair.

Secretary: Dean Chang

Members

58 individuals were members before the session. 25 potential members are eligible to become members at this session.

See Annex for details.

Attendance

There are 3 attendance books this week: TGd, TGe and TGC.

Session participation credit requires participation in 6 of the 8 intervals for this session.

Comment made by David Trinkwon to make sure that Task Groups meet according to the agenda. Task Group chairs should post changes to the agenda on the master board by the registration area, and also let Roger Marks know so he can update the website.

Agenda <<http://ieee802.org/16/mtg/mtg26/opening.html>>

Motion 1: David Johnston To approve Opening Plenary agenda on the 802.16 server, 2nd Jonathan Labs.

Motion 1: carries by unanimous voice vote.

Motion 2: Brian Kiernan, Motion: To approve Minutes of Session #25 (IEEE 802.16-03/25) and decisions therein. 2nd Bob Nelson.

Discussion: no comments.

Motion 2: carries by voice vote, with one voice voting no.

Motion 3: David Trinkwon Future Working Group minutes shall include opening and closing times of all plenary meetings and the closing plenary minutes should include the final count of eligible intervals and participation threshold. 2nd Itzik Kitrozer.

Motion 3: carries by unanimous voice vote

Chair's Status Report (IEEE 802.16-03/32)

Copyright Procedures

The Chair reviewed copyright procedures and referred to the following link, which covers information regarding copyrights for documents submitted to IEEE 802.16:

<http://iee802.org/16/ipr/copyrights>

IEEE-SA Rules (Patents)

The following advice was provided by the Chair:

The IEEE's Patent Policy is consistent with the ANSI patent policy and is described in Clause 6 of the IEEE SA Standards Board Bylaws;

Early disclosure of patents which may be essential for the use of standards under development is encouraged;

Disclosures made of such patents may not be exhaustive of all patents that may be essential for the use of standards under development, and that neither the IEEE, the WG nor the WG Chairman ensure the accuracy or completeness of any disclosure or whether any disclosure is of a patent that in fact may be essential for the use of standards under development.

Slide #1 ("IEEE-SA Standards Board Bylaws on Patents in Standards") and Slide #2 ("Inappropriate Topics for IEEE WG Meetings") were shown.

An opportunity was provided for WG members to identify or disclose patents that the WG member believes may be essential for the use of that standard.

No disclosures were made regarding this announcement.

IEEE-SA Actions:

1 April 2003:

Published, as an IEEE Standard,

IEEE Standard 802.16a-2003 ("IEEE Air Interface for Fixed Broadband Wireless Access Systems – Medium Access Control Modifications and Additional Physical Layer Specifications for 2-11 GHz ")

Plaques were presented to the following:

Working Group Chair

Brian Kiernan, Task Group Chair

Nico van Waes, Technical Editor

Dean Chang, WG/TG Secretary

Walt Roehr (posthumous award, to be mailed to widow with a letter from WG)

IEEE 802.16 Conformance Issues

Information was provided regarding claims of conformance to drafts.

IEEE-SA Stds Board enumerated PARs 1802.16.X as 802.16/Conformance0X [X=1,2,3]

IEEE Std 802.16/Conformance01 (PICS, 10-66 GHz) approved on 12 June; publication expected "soon"

based on RevCom submittal IEEE 802.16-03/11

Congratulations to TGC

Ken Stanwood, Chair

Carl Eklund, Technical Editor

P802.16.2a

Phil Whitehead, Chair

P802.16.2a/D5 submitted to RevCom

Concern that it should have been a Revision of 802.16.2, not an amendment to 802.16.2

IEEE 802.16-03/23 ("Summary of Changes") submitted for RevCom consideration

RevCom approved draft in June 2003

IEEE-SA Stds Board did not approve

Concern that it should have been a Revision of 802.16.2, not an amendment to 802.16.2

compromise offered: will require re-ballot (unless no one new joins the ballot group)

PAR for Revision pre-submitted (IEEE 802.16-03/27)

Ballot Group formation in progress

IEEE-SA Policy on Conformance to Drafts

Dear Working Group Chair and Sponsor Chair:

This letter is to inform you that the IEEE-SA has implemented a process to respond to companies that are claiming conformance to an IEEE draft document.

If you become aware that an organization/company is claiming conformance to a draft document of the IEEE, you should send written notification (including company name, address, and a copy of the offending claim, etc.) to:

Secretary IEEE Standards Board Standards Department 445 Hoes Lane Piscataway, NJ 08854

Upon receipt of the notification, the status of the draft will be verified and a letter will be sent to the organization/company indicating that the document to which they are claiming conformance is an unapproved draft of a proposed IEEE Standard. As such, this document has not yet been fully reviewed for completeness, functionality, or interoperability, and is subject to change at any time prior to approval as an IEEE Standard.

We encourage you to forward this information to your working groups.

For more information on this, please visit our web: <http://standards.ieee.org/faqs/copyrightFAQ.html>

If you have any questions or concerns regarding the above, please contact your staff liaison. If you are not sure who your staff liaison is, please click here: <http://standards.ieee.org/people/liaisons.html>

Best regards,

Judith Gorman Secretary, IEEE-SA Standards Board

Agenda for the Week

The agenda of the week is located at the following link.

<http://iee802.org/16/meetings/mtg26/agenda.html>

Task Groups

TG2

Phil Whitehead, Chair
Nico van Waes and Reza Arefi, Technical Editors

Motion4 Phil Whitehead To delegate to TG2 Chair and the WG Chair (a) the revision of Revision PAR 802.16.2 in accordance with comments, and (b) the submittal of such revision to the SEC by 5 pm Wednesday, 2nd Ken Stanwood.
Motion4 carries by unanimous voice vote.

Comments regarding proposed new PARs within IEEE 802

Provide feedback to Roger if you would like the working group to provide comments.

TGC

Ken Stanwood, Chair

[P802.16/Conformance02](#) (10-66 GHz Test Suite Structure and Test Purposes [TSS&TP])

100% approval of draft in [WG Letter Ballot #10 \(plus Recircs #10a and #10b\)](#)

received 16 comments in Recirc #10a per WG authorization, developed comment resolutions within Task Group (Chair and Editor) comment resolutions recirculated as ([IEEE 802.16-03/17r4](#)) in [Recirc #10b](#). No responses received.

Motion 5: Ken Stanwood "To request SEC approval to forward P802.16/Conformance02/D3 for LMSC Sponsor Ballot." 2nd Brian Kiernan.

Motion 5: carries 23-0-1.

P802.16/Conformance03: Call for comments completed on proposed draft. Contribution received is a possible draft. Will propose motion at Closing Plenary.

TGe

Brian Kiernan , Chair
Shawn Taylor, Vice Chair
Ron Murias, Technical Editor

This group is making modifications to IEEE Std 802.16 for mobility. 65 comments need to be reviewed, plus a number of contributions. The intent is to have a document to go to WG letter ballot by the closing plenary.

Future Sessions

[Session #27:](#)

8-11 September 2003 at the Denver Marriott City Center, Denver, CO, USA

hosted by Roger Marks, with the support of the [IEEE Microwave Theory and Techniques Society](#)

Session #28:

10-13 November 2003 at the Hyatt Regency Albuquerque, Albuquerque, NM, USA with [IEEE 802 Plenary Session](#)

Session #29:

12-15 January 2004: [Fairmont Hotel Vancouver](#), Vancouver, British Columbia, Canada
Sponsored by IEEE 802; joint with other 802 wireless groups)

Session #30:

14-19 March 2004 at the Hyatt Orlando, Kissimmee, FL, USA with [IEEE 802 Plenary Session](#)

Session #31:

Open. Possibly May in Washington, DC.

Session #32:

11-16 July 2004 at the Portland Hilton, Portland, OR, USA with [IEEE 802 Plenary Session](#)

Vice Chair Election

Conducted in accordance with procedure specified in IEEE 802.16-03/28. Ken Stanwood was nominated in advance of session and was named on ballot. Changhoi Koo and Naftali Chayat were nominated during Opening Plenary. Candidates spoke, then left the room for discussion. Ballots were counted by Chair and Secretary in front of any interested observers.

Candidates	Votes
Ken Stanwood	16
Changhoi Koo	7
Naftali Chayat	7

Ken Stanwood wins the Vice Chair election. The Chair will prepare a motion of confirmation to the 802 Executive Committee.

TGd

Gordon Antonello, Chair
Nico van Waes, Technical Editor

The group will work on comment resolution, reviewing 124 comments on P802.16d/D3 received in WG Recirc Ballot #11a.

A revised 802.16d PAR (IEEE 802.16-03/26r1) is under consideration by the IEEE 802 EC and NesCom. It would convert the project from an Amendment project into a Revision project.

Motion 6: Gordon Antonello: To delegate to TGd Chair and the WG Chair (a) the revision of Revision PAR 802.16d in accordance with comments, and (b) the submittal of such revision to the SEC by 5 pm Wednesday, 2nd Bob Nelson.

Motion 6: carries by unanimous voice vote.

Closing

Motion 7: Bob Nelson, To adjourn the meeting 2nd Gordon Antonello.

Motion 7: carries by unanimous voice vote.

The meeting was adjourned at 3:38pm on 21 July 2003.

Working Group “New Concepts” Forum

The meeting was called to order at 4:00pm on 21 July 2003. The following were presented the by author with the asterisk:

IEEE C802.16-03/10r1

Mesh Networks in Fixed Broadband Wireless Access (Paul Piggan, Barry Lewis, and Phil Whitehead*)

IEEE C802.16-03/09 (slides S802.16-03/09)

Switched beam antennas in millimeter-wave band broadband wireless access networks (J. Herrera*, V. Polo, J. M. Martinez, P. Sanchis, J. L. Corral, J. Marti)

IEEE S802.16-03/11 (see also IEEE C802.16-03/11)

Proposal to Add Point-to-Point Option to IEEE 802.16 MAC (Roger Marks and Ken Stanwood*)

IEEE C802.16-03/12

IEEE 802.16a/e below 2 GHz (Yigal Leiba)

IEEE C802.16-03/13

Some thoughts for the New Concepts forum (Vladimir Yanover, Naftali Chayat*, Tal Kaitz, Marianna Goldhammer)

Motion 8: Itzik Kitroser to adjourn the meeting 2nd Ron Murias.

Motion 8: carries by unanimous voice vote.

The meeting was adjourned at 5:59 pm on 21 July 2003.

Closing Plenary

Opening

Chair Roger Marks called the meeting to order at 8:08 am on 25 July 2003.

Agenda

Motion 9: David Johnston to approve the agenda as presented, 2nd Gordon Antonello

Motion 9: carries by unanimous voice vote

Task Group 2

Chair: Phil Whitehead

Motion 10: Phil Whitehead, To forward the P802.16.2a Revision PAR (IEEE 802.16-03/27r1) to the 802 SEC, 2nd Ken Stanwood.

Motion 10: carries 19-0-0.

Motion 11: Phil Whitehead, To forward, for IEEE LMSC Sponsor Ballot, P802.16.2a/D6, reformatted from P802.16.2a/D5 into a draft Revision, 2nd Brian Kiernan.

Motion 11: carries 17-0-0.

Task Group C

Chair: Ken Stanwood

Motion 12: Ken Stanwood, To accept, as a Working Group Draft P802.16/Conformance03/D1, the contribution IEEE C802.16Conf03-03/02, and to open a Working Group Letter Ballot #12 on that Draft, 2nd Gordon Antonello.

Motion 12: carries 17-0-0.

Task Group d

Chair: Gordon Antonello

Motion 13: Gordon Antonello, To accept IEEE 802.16-03/18r7 as the resolutions of Recirculation Ballot #11a, 2nd Brian Kiernan

Motion 13: carries by unanimous voice vote.

Motion 14: Gordon Antonello, To forward the revised P802.16d PAR ([IEEE 802.16-03/26r3](#)) to the 802 SEC, 2nd Ron Murias.

Note: Original motion was on 26r2. It was altered by a motion to amend (made by Itzik Kitroser) to replace “retaining all major features and not adding modes” with “retaining all modes and major features without adding modes” in the Scope. The motion to amend carried 15-1-1.

Motion 14: carries 22-0-0

Motion 15: Gordon Antonello, Following approval by NesCom of the revised P802.16d PAR, to open a Working Group Letter Ballot #13 on a draft Revision, to be created by taking a consolidated version of IEEE Std 802.16, 802.16a, and 802.16c and then editing in the changes developed in Letter Ballot #11/Recirculation Ballot #11a. 2nd Itzik Kitroser.

Motion 15: carries 23-0-0.

Motion 16: Gordon Antonello, Pending a non-approval of the revised P802.16dPAR, to instruct the TGd Editor to incorporate the resolutions contained in IEEE 802.16-03/18r7 into the next TGd draft P802.16d/D3, 2nd Shawn Taylor.

Motion 16: carries by unanimous voice vote.

Task Group e

Chair: Brian Kiernan

Task Group e reported that it resolved comments and decided that the current document is not ready for Working Group Letter Ballot. Instead, an additional Task Group Review/Call for Comments will be initiated.

IEEE 802 Issues

802.18 TAG

Chair Carl Stevenson reported.

Roger Marks extended 802.16 Working Group membership to Carl Stevenson by Chair's Discretion.

Marianna Goldhammer noted that she working to raise the power level limits and open up more spectrum in 5 GHz bands.

Motion 17: Carl Stevenson, to Approve 18-03-0041r0 authorizing the Chair of 802.18 to do necessary editorial and formatting changes, seek SEC approval as an 802 document, and file the document in a timely fashion with the FCC, 2nd David Trinkwon

Motion 17: carries 21-0-0.

Motion 18: Carl Stevenson, to Approve 18-03-0042r0 authorizing the Chair of 802.18 to do necessary editorial and formatting changes, seek SEC approval as an 802 document, and file the document in a timely fashion with the FCC, 2nd David Johnston.

Motion 18: carries 19-0-0.

802.19 TAG

Phil Whitehead reported.

The progress in this group is slow because the group is being diverted into specific technical and inter-WG issues. The terms of reference are drafted but still not approved. No resources are available to produce more substantial coexistence advice.

We need to determine what coexistence analysis should be required in standards. Also a question is whether there should be any obligation to include mitigation techniques or should it be left to regulation and normal market competition.

Without objection, the Chair named Phil Whitehead as the 802.16 WG liaison to 802.19.

802 Handoff Study Group

Chair David Johnston reported.

David made a presentation discussing the possible ways for handoff to be added into 802 standards.

Roger Marks will make a motion at the 802 EC to renew this study group.

Proposed New 802.15 Study Group on new 802.15.4 PHY

The 802.15 WG will propose this to the EC tomorrow. No more information to report.

802 SEC Motions

Roger will make 4 different motions at the IEEE 802 SEC meeting. They are listed at the following link.

<http://ieee802.org/16/meetings/mtg26/lmsc>

IEEE 802 SEC Rule Changes

The SEC will now be known as the EC (Executive Committee) once rule change is adopted tomorrow.

There is a significant new proposal for changing membership within Working Groups. The proposal would eliminate the granting of membership to all participants at the initial meeting of the working group. If a study group evolves into a working group, participation in the SG would count towards working group membership. Numerous other changes to the membership rules are part of this same proposal.

A straw poll was held on voting on the LMSC rule changes, where yes is to vote in favor the change and no is against. The result was 0-21.

Motion19: David Johnston, 802.16 directs the chair to vote against the proposed LMSC membership rules changes as currently stated 2nd Brian Kiernan

Motion 19: carries 20-0-0.

New 802 PARs

The only PAR that received comment was the 802.11n PAR.

New Concepts Forum

A number of new concepts were discussed that may potentially be of value in future evolutions of IEEE Std 802.16. Some might be possible to incorporate in the 802.16d Revision (if the PAR is approved).

Liaison

ETSI BRAN

Gordon Antonello presented a letter from ETSI HiperMAN. The work will be going through BRAN approval and is well on its way to be approved by the end of this year.

Future Sessions <<http://ieee802.org/16/calendar.html>>

Session #27:

8-11 September 2003 at the Denver Marriott City Center, Denver, CO, USA

Hosted by Roger Marks, with the support of the IEEE Microwave Theory and Techniques Society

Details on guest room reservations and registration were discussed.

Session #28:

10-13 November 2003 at the Hyatt Regency Albuquerque, Albuquerque, NM, USA with the IEEE 802 Plenary Session

Session #29:

12-15 January 2004: Fairmont Hotel Vancouver, Vancouver, British Columbia, Canada

Sponsored by IEEE 802; joint with other 802 wireless groups)

Session #30:

14-19 March 2004 at the Hyatt Orlando, Kissimmee, FL, USA with the IEEE 802 Plenary Session

Session #31 May 2004. Working to collocate with WCA conference, potentially in May in Washington, DC, USA.

Session #32:

11-16 July 2004 at the Portland Hilton, Portland, OR, USA with the IEEE 802 Plenary Session

Member Issues

Letter to Family of Walt Roehr (IEEE 802.16-03/33) reviewed and approved.

Letter to Family of Chet Shirali (IEEE 802.16-03/34) reviewed and approved.

Publicity

The chair was authorized, without objection, to create the Session #26 Report. See Annex, and <<http://ieee802.org/16/meetings/mtg26/report.html>>.

New Business

None.

Closing

Motion 20: Naftali Chayat , To adjourn the meeting, 2nd ..Lei Wang

Motion 20: carries by unanimous voice vote.

The meeting was adjourned at 11:10am on 25 July 2003.

Attendance List: 802.16 Session #26

21-25 July 2003

This is the attendance list for Session #26 (with 81 names):

"Participated"*	Name\Given	Name\Family	Company	City	State\Province	Country
Yes	Aditya	Agrawal	Fujitsu Microelectronics Inc.	Cupertino	CA	USA
Yes	Baraa	Al-Dabagh	Intel Corporation	San Jose	CA	USA
Yes	Gordon	Antonello	Wi-LAN Inc.	Calgary	AB	Canada
	Ludger	Arnoldi	British Telecom Ignite			UK
	Phillip	Barber	Broadband Mobile Technologies	Frisco	TX	USA
Yes	Suresh	Bazaj		Fremont	CA	USA
Yes	Harry	Bims	AirFlow Networks	Sunnyvale	CA	USA
Yes	David	Castelow	Airspan			UK
Yes	Dean	Chang	Aperto Networks	Milpitas	CA	USA
Yes	Naftali	Chayat	Alvarion Ltd.	Tel Aviv		Israel
Yes	Po-Lin	Chiu	Industrial Technology Research Institute (ITRI)	Hsinchu		Taiwan
	Charles	Cook	Qwest	Denver	CO	USA
	Kenneth	Cook	Mark IV Industries Ltd.			USA
	J. Francois	Crepin	Metalink			USA
Yes	Brian	Eidson	Conexant Systems, Inc.	San Diego	CA	USA
Yes	Roger	Eline	Intel Corp.			USA
Yes	Marc	Engels	Loranet N.V.	Heverlee		Belgium

Yes	Avraham	Freedman	Hexagon System Engineering Ltd.	Petah-Tikva		Israel
	Dan	Gavin				
Yes	Marianna	Goldhammer	Alvarion	Tel Aviv		Israel
	Reza	Golshan	Fujitsu Microelectronics America, Inc.	Sunnyvale	CA	USA
Yes	Zion	Hadad	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Yes	David	Hartman	CarrierComm	Encinitas	CA	USA
	Javier	Herrera	Universidad Politécnic de Valencia	Valencia		Spain
	Keith	Holt	Intel Corp.	Sacramento	CA	USA
	Craig	Hornbuckle	Sierra Monolithics	Redondo Beach	CA	USA
	David	Johnston	Intel Corporation	Hillsboro	OR	USA
	Panyuh	Joo	Samsung Electronics Co., Ltd.	Sungnam	KYUNGGI	Korea
Yes	Brian	Kiernan	InterDigital Communications Corp	King of Prussia	PA	USA
Yes	Itzik	Kitroser	Runcom Technologies ltd	Rishon Le Zion		Israel
Yes	Changhoi	Koo	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi-do	Korea
Yes	Jonathan	Labs	Wavesat Wireless, Inc.	Ville St-Laurent (Montreal)	PQ	Canada
Yes	Yigal	Leiba	Runcom Technologies Ltd.	Rishon Lezion		Israel
Yes	Donald	Leimer	Proxim	Long Beach	CA	USA

Yes	Barry	Lewis	Radiant Networks PLC	Little Chesterford	ESSEX	UK
Yes	Lingjie	Li	Redline Communications Corp.	Markham	ON	Canada
Yes	John	Liebetreu	Intel Corporation	Chandler	AZ	USA
Yes	Hyoungsoo	Lim	ETRI	Daejeon		Korea
	Huai-An	Lin	Intel Corp.			USA
Yes	Heinz	Lycklama	Open Systems Technology Associates	Arlington	WA	USA
Yes	Martin	Lysejko	Airspan	Uxbridge	Middlesex	UK
	P.M.	Mammen				
Yes	Roger	Marks	NIST	Boulder	CO	USA
Yes	Russell	McKown	MacPhy Modems	Richardson	TX	USA
	Scott F.	Migaldi	Motorola, Inc.	Schaumburg	IL	USA
Yes	Ronald	Murias	Wi-LAN Inc.	Calgary	AB	Canada
	Jamie	Nasrawi	RF Magic, Inc.	San Diego	CA	USA
Yes	Robert	Nelson	MacPhy Modems	Richardson	TX	USA
	Sean	O'Hara	NPSTC			
	Peter	Oomen	Mark IV Industries Ltd.			USA
	DS	Park	Samsung Electronics Co., Ltd.			Korea
Yes	Won-Hyoung	Park	Samsung Advanced Institute of Technology (SAIT)	Suwon		Korea
	Greg	Phillips				
	Carl	Posthuma	Lucent Technologies			USA

Yes	Kamlesh	Rath	Arcwave Networks	Fremont	CA	USA
Yes	Andrew	Sago	BTextact Technologies			UK
Yes	Atul	Salvekar	Intel Corp.			
	Raj	Savara	VeriLAN, LLC	Tigard	OR	USA
Yes	Yossi	Segal	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Yes	Radu	Selea	Redline Communications Inc.	Markham	ON	Canada
Yes	Mohammad	Shakouri	Alvarion Ltd.	San Jose	CA	USA
	Tamara	Shelton	Athene Consulting	Woodside	CA	USA
Yes	James	Simkins	Xilinx	Salt Lake City	UT	USA
Yes	Yeong Moon	Son	Samsung			Korea
	Massimo	Sorbara	GlobespanVirata, Inc.	Red Bank	NJ	USA
Yes	Kenneth	Stanwood	Ensemble Communications	San Diego	CA	USA
Yes	Yoshihiro	Suzuki	Panasonic Mobile Communications	Yokohama, Kanagawa-ken		Japan
Yes	Shawn	Taylor	Wi-LAN	Calgary	AB	Canada
Yes	Jose	Tellado	Intel Corporation	San Jose	CA	USA
	William	Thomson	Comtech AHA Corp.	Pullman	WA	USA
	Tim	Thornton	California Amplifier, Inc.	Camarillo	CA	USA
Yes	David	Trinkwon	Medley Systems Ltd	Maidenhead	Berks	UK
Yes	Rainer	Ullmann	Wavesat Wireless Inc.	Ville St.Laurent (Montreal)	PQ	Canada

	Nico	van Waes	Nokia Networks	Mountain View	CA	USA
Yes	Eyal	Verbin	Airspan Networks (Israel) Ltd.	Lod		Israel
Yes	Lei	Wang	Wi-LAN Inc.	Calgary	AB	Canada
	Brian	Wenger	Earthlink			USA
Yes	Philip	Whitehead	Radiant Networks PLC	Little Chesterford	ESSEX	UK
Yes	Vladimir	Yanover	Alvarion Ltd.	Herzlya		Israel
Yes	Choong-il	Yeh	ETRI	Deajeon		Korea
Yes	Chulsik	Yoon	ETRI			Korea

*Session #26 "participation" credit granted to those participating in six of the eight session intervals, in meetings of the IEEE 802.16 Working Group, the 802.16d or 802.16e Task Groups, or the 802.18 or 802.19 TAGs.

The IEEE 802.16 Working Group on Broadband Wireless Access Standards

IEEE 802.16 Members

Update: 28 July 2003

Number of members: 57

Next scheduled update: following Session #28

See also:

- [Rights of Membership](#)
- [Acquiring and Retaining 802.16 Membership](#)
- [Potential Members](#)
- [those recently losing membership](#)
- [Members in Peril](#)
- [Observers](#)
- [Update your contact information](#)

Name\Given	Name\Family	Company	City	State\Province	Country
Aditya	Agrawal	Fujitsu Microelectronics Inc.	Cupertino	CA	USA
Gordon	Antonello	Wi-LAN Inc.	Calgary	AB	Canada
Reza	Arefi	ArrayComm, Inc.	Washington	DC	USA
Eli	Avivi	WaveIP Ltd.	Yokneam		Israel
Dean	Chang	Aperto Networks	Milpitas	CA	USA
Naftali	Chayat	Alvarion Ltd.	Tel Aviv		Israel
Rémi	Chayer	Harris Corporation	Dollard-des-Ormeaux	PQ	Canada
Stephen	Dick	InterDigital Communications Corp.	Melville	NY	USA
Brian	Edmonston	iCODING Technology Inc.	San Diego	CA	USA

Brian	Eidson	Conexant Systems, Inc.	San Diego	CA	USA
Carl	Eklund	Nokia Research Center	Helsinki		Finland
Marc	Engels*	Loranet N.V.	Heverlee		Belgium
Avraham	Freedman	Hexagon System Engineering Ltd.	Petah- Tikva		Israel
G. Jack	Garrison	Harris Corporation	New Westminster	BC	Canada
Marianna	Goldhammer	Alvarion	Tel Aviv		Israel
Zion	Hadad	Runcom Technologies Ltd.	Rishon Le Zion		Israel
David	Johnston*	Intel Corporation	Hillsboro	OR	USA
Panyuh	Joo	Samsung Electronics Co., Ltd.	Sungnam	KYUNGGI	Korea
Tal	Kaitz	Alvarion Ltd.	Tel Aviv		Israel
Phil	Kelly	BeamReach Networks, Inc.	Sunnyvale	CA	USA
Ofer	Kelman	Airspan Networks (Israel) Ltd.	Lod		Israel
Brian	Kiernan	InterDigital Communications Corp	King of Prussia	PA	USA
Itzik	Kitroser	Runcom Technologies ltd	Rishon Le Zion		Israel
Changhoi	Koo*	Samsung Electronics Co., Ltd.	Suwon-si	Gyeonggi-do	Korea
Jonathan	Labs	Wavesat Wireless, Inc.	Ville St-Laurent (Montreal)	PQ	Canada
Yigal	Leiba	Runcom Technologies Ltd.	Rishon Lezion		Israel
Barry	Lewis*	Radiant Networks PLC	Little Chesterford	ESSEX	UK
Lingjie	Li	Redline Communications Corp.	Markham	ON	Canada
John	Liebetreu	Intel Corporation	Chandler	AZ	USA
Lars	Lindh	Nokia Research Center	Helsinki		Finland
Hui-Ling	Lou	Marvell Semiconductor	Sunnyvale	CA	USA
Heinz	Lycklama	Open Systems Technology Associates	Arlington	WA	USA

Roger	Marks	NIST	Boulder	CO	USA
Russell	McKown	MacPhy Modems	Richardson	TX	USA
Andrew	Middleton	Airspan Communications	Uxbridge	Middlesex	UK
Ronald	Murias	Wi-LAN Inc.	Calgary	AB	Canada
Robert	Nelson	MacPhy Modems	Richardson	TX	USA
Kamlesh	Rath*	Arcwave Networks	Fremont	CA	USA
Gene	Robinson	E. A. Robinson Consulting, Inc.	McKinney	TX	USA
Yossi	Segal	Runcom Technologies Ltd.	Rishon Le Zion		Israel
Radu	Selea	Redline Communications Inc.	Markham	ON	Canada
James	Simkins*	Xilinx	Salt Lake City	UT	USA
Kenneth	Stanwood	Ensemble Communications	San Diego	CA	USA
Carl	Stevenson*	Agere	Allentown	PA	USA
Paul	Struhsaker	Texas Instruments, Inc.	Plano	TX	USA
Yoshihiro	Suzuki*	Panasonic Mobile Communications	Yokohama, Kanagawa-ken		Japan
Shawn	Taylor	Wi-LAN	Calgary	AB	Canada
William	Thomson	Comtech AHA Corp.	Pullman	WA	USA
David	Trinkwon	Medley Systems Ltd	Maidenhead	Berks	UK
Rainer	Ullmann	Wavesat Wireless Inc.	Ville St.Laurent (Montreal)	PQ	Canada
Nico	van Waes	Nokia Networks	Mountain View	CA	USA
Eyal	Verbin	Airspan Networks (Israel) Ltd.	Lod		Israel
Arthur	Wang	GDSS	Buena Park	CA	USA
Lei	Wang	Wi-LAN Inc.	Calgary	AB	Canada
Stanley	Wang	CyberTAN Technology, Inc.	San Diego	CA	USA
Philip	Whitehead	Radiant Networks PLC	Little Chesterford	ESSEX	UK
Vladimir	Yanover	Alvarion Ltd.	Herzlya		Israel

*Membership newly attained at Session #26.

The following failed to retain membership following IEEE 802.16 Session #26.

Posted: 28 July 2003

Name\Given	Name\Family	Company	City	State\Province	Country
Jori	Arrakoski	Nokia Mobile Phones	Salo		Finland
Malik	Audeh	Trapeze Networks, Inc.	Pleasanton	CA	USA
Henry	Eilts	Texas Instruments, Inc.	Dallas	TX	USA
David	Husson	Sandy Neck Consulting	East Sandwich	MA	USA
Thomas	Kolze	Broadcom Corp.	Phoenix	AZ	USA
Apurva	Mody	Georgia Institute of Technology	Atlanta	GA	USA
Stanley	Reible	Global Communications Devices, Inc.	Westford	MA	USA
Amir	Sarajedini	BeamReach Networks, Inc.			USA
Joanne	Wilson	ArrayComm, Inc.	Washington	DC	USA

IEEE 802.16 Session #26 Report:



Summary

Session #26 of the IEEE 802.16 Working Group on Broadband Wireless Access was held on 21-25 July 2003 in San Francisco, CA, USA, along with the IEEE 802 Plenary Session. The site was the Hyatt Regency San Francisco Embarcadero. 81 people attended.

IEEE 802.16 Working Group Elects Ken Stanwood as Vice Chair

At its Opening Plenary, the IEEE 802.16 Working Group elected Ken Stanwood as Vice Chair, filling a vacancy. Three candidates were nominated, and Stanwood avoided a runoff by receiving a majority of the votes. On 25 July, the IEEE 802 Executive Committee (EC) unanimously confirmed the election.

IEEE Standard 802.16a, Extending WirelessMAN™ Air Interface to 2-11 GHz, Published

On 1 April 2003, IEEE Standard 802.16a was published by the IEEE-SA. The standard, a non-line-of-sight extension of the global IEEE 802.16 WirelessMAN™ standard for 10-66 GHz published in April 2002, provides for fixed broadband wireless access (BWA) in both licensed and license-exempt 2-11 GHz bands. At the IEEE 802.16 Opening Plenary of 21 July, award plaques were presented to several members active in the development of this standard.

Followup activity continued in Task Group d, which proceeded with a Working Group Letter Ballot and recirculation on a draft of system profiles to support compliance testing related to IEEE Std 802.16a. The Working Group and IEEE 802 Executive Committee (EC) approved a change to the project PAR to convert the project from an Amendment into a Revision. This will allow the published standard arising from the project to incorporate IEEE Stds 802.16, 802.16a, and 802.16c, along with the new material, in one integrated publication. Once the new PAR is approved by NesCom, the new consolidated document will be subjected to a further Working Group Letter Ballot.

Mobile Wireless MAN (802.16e) Project Continues Task Group Review

Task Group e considered its second cycle of comments in a Task Group Review regarding the P802.16e project, which will enhance the WirelessMAN air interface for fixed/mobile support. The results of a Handoff Ad Hoc Committee were reviewed and updated. The Task Group voted to conduct an additional Task Group Review, involving a call for comments.

Interoperability Documentation for 10-66 GHz Proceeds

Task Group C continued its progress toward interoperability documentation for the 10-66 GHz WirelessMAN-SC™ air interface. Work progressed on three projects, which were renumbered by NesCom in a simple scheme:

1. The IEEE-SA Standards Board, on 12 June, approved [IEEE Standard 802.16/Conformance01](#) as an IEEE Standard. The standard (known during development as P1802.16.1) is a Protocol Implementation Conformance Statement (PICS) Proforma.
2. A Working Group Letter Ballot of [P802.16/Conformance02](#), the Test Suite Structure and Test Purposes draft (formerly 1802.16.2), concluded with unanimous approval after two recirculations. The IEEE 802 EC agreed to forward the resulting Draft 3 for IEEE Sponsor Ballot.
3. The Task Group and Working Group adopted a draft of the [P802.16/Conformance03](#) Radio Conformance Tests document and voted to review it in a Working Group Letter Ballot.

Approval of Recommended Practice P802.16.2a™ Delayed

Although it passed its IEEE Sponsor Ballot unanimously and was endorsed by IEEE-SA's RevCom, Draft 5 of the [P802.16.2a](#) Recommended Practice on Coexistence, including recommendations for 2-11 GHz, was not approved by the IEEE-SA Standards Board. The Board was concerned that the document should have been balloted as a Revision instead of as an Amendment. The document will be reballoted beginning in early August.

Working Group Liaison Activities

A [liaison letter from ETSI BRAN](#) was reviewed.

802.16 Requests Approved at EC Meeting

All 802.16 motions were unanimously approved at the 802 EC meeting of 25 July 2003. A [summary](#) is available.

Documents and Publications

The [Session #26 document list](#) indexes the session documents.

Future Meetings

- IEEE 802.16's [Session #27](#) will take place in Denver, Colorado, USA on 8-11 September 2003.
- IEEE 802.16's [Session #28](#) will take place in Albuquerque, NM, USA on 9-14 Nov 2003 in conjunction with the [IEEE 802 Plenary Session](#).
- IEEE 802.16's [Session #29](#) will take place in Vancouver, British Columbia, Canada on 12-15 January 2004 in conjunction with sessions of the other 802 wireless groups.

The [IEEE 802.16 Working Group on Broadband Wireless Access Standards](#) is developing the **WirelessMAN™** Standard for wireless metropolitan area networks. IEEE 802.16 is a unit of the [802 LAN/MAN Standards Committee](#), the premier transnational forum for wired and wireless networking standardization. A [list of IEEE 802.16 standards and drafts](#) is available on-line, as is a [project milestone summary](#).

With the approval of the 802.16 Working Group, this report was drafted and edited (29 July 2003 update) by:

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